

## IC250: Lab assignment 8

HackerRank link: <http://www.hackerrank.com/lab-8-1>

### 1. Path printing for bullet train.

Consider the bullet train in the previous assignment. You have already determined the time taken to travel between two cities. Now, given the same map, print all the intermediate stations in the shortest path between any two cities. Test cases are given in HackerRank.

### 2. Safe cities.

In a given city, all roads are one-ways. Sometimes, major roads have two lanes, one for each direction. Sometimes, you may need to take a longer route to reach your destination. Sometimes, your destination may not be reachable because of the one-ways (no route exists to the destination.)

A city in which you can start from a location, reach a destination of your choice, and return back to the start location is termed *safe*. Remember, that this must be possible for any start location and destination.

Given a city road network as a graph, determine if the city is a safe city. Test cases are in HackerRank.

*Hint: you need to find if the directed graph is strongly connected or not.*

